IN THE SPECIFICATION

Please replace the Title on page 1, lines 1-3, with the following Title:

PROTECTIVE FILM FOR FPD, VAPOR ~~DEPOSITED~~ DEPOSITION MATERIAL FOR PROTECTIVE FILM AND ITS PRODUCTION METHOD, FPD, AND MANUFACTURING DEVICE FOR FPD PROTECTIVE FILM

Please insert as the first line on page 1 the following text:

The present application is a Continuation application of U.S. Application No. 09/901,908, pending.

Please replace the paragraph on page 1, lines 6-11 with the following paragraph:

The present invention relates to a protective film for a flat panel display (FPD) such as a plasma display panel (PDP), a plasma addressed liquid crystal display (PALC), and the like and an FPD in which the protective film is used, a vapor ~~deposited~~ deposition material suitable for forming a protective film for FPD and its production method, and a device for manufacturing an FPD protective film.

Please replace the paragraph on page 1, lines 25-32 with the following paragraph:

In the past, known examples of depositing this protective film included methods involving the formation of an FPD protective film using a vacuum process such as electron beam vapor ~~deposited~~ deposition, sputtering and ion plating. In the case of electron beam vapor ~~deposited~~ deposition and ion plating, the vapor ~~deposited~~ deposition material serving as the raw material for forming the protective film, and the FPD on which the protective film is formed, are placed in a vacuum container, the vapor ~~deposited~~ deposition material is heated

under a high vacuum, or evaporated using an electron beam or plasma, and the vapor is agglutinated in the form of a thin film on the surface of the FPD.

Please replace the paragraph on page 3, lines 14-15 with the following paragraph:

In addition, alkaline earth metal oxides are used as vapor ~~deposited~~ deposition materials that serve as the raw materials for forming a superior protective film as described above.

Please replace the paragraph on page 3, lines 16-24 with the following paragraph:

However, similar to MgO films, if these alkaline earth metal oxides are exposed to the atmosphere before being used as vapor ~~deposited~~ deposition materials, they are easily deteriorated as a result of reacting with CO_2 and H_2O. Consequently, it is known that, after placing vapor ~~deposited~~ deposition materials comprised of alkaline earth metal oxides in a vacuum container, degassing exhaust treatment for a long period of time while heating in a vacuum is required. Namely, if degassing exhaust treatment is not performed for a comparative long period of time, impurity gases such as H_2O, H_2, O_2, CO, CO_2 and N_2 generated in large amounts from the deteriorated surface of the vapor ~~deposited~~ deposition material cause problems in the characteristics of the resulting protective film.

Please replace the paragraph on page 6, lines 7-10 with the following paragraph:

In consideration of the above problems, a first object of the present invention is to provide a vapor ~~deposited~~ deposition material for an FPD protective film and its production method that enables the degassing exhaust treatment time immediately after placing in a container to be shortened.

Please replace the paragraph on page 6, lines 11-13 with the following paragraph:

A second object of the present invention is to provide a vapor ~~deposited~~ deposition material for an FPD protective film and its production process that enables the formation of a film having stable and uniform characteristics.

Please replace the paragraph on page 6, line 32 through page 7, line 2 with the following paragraph:

In order to achieve the above objects, the present invention provides a vapor ~~deposited~~ deposition material for FPD protective film that is formed from a polycrystalline body, a sintered body, or single crystal having a surface covered with a fluoride layer.

Please delete the paragraph on page 7, lines 12-13.

Please replace the paragraph on page 7, lines 3-11 with the following paragraph:

Consequently, since the surface of the polycrystalline body, sintered body, or single crystal is covered with a fluoride layer, the polycrystalline body, sintered body, or single crystal hardly reacts at all with CO_2 gas or H_2O gas in the atmosphere even this vapor ~~deposited~~ deposition material is exposed to the atmosphere for a long period of time. As a result, the amount of harmful substances generated after placing this vapor ~~deposited~~ deposition material in a vacuum deposition container is suppressed to below that of the prior art, and the amount of time for degassing exhaust treatment that has conventionally been carried out to remove these harmful substances can be shortened, or the gas treatment step can be omitted, thereby making it possible to reduce FPD production costs to below the level of the prior art.

Please replace the paragraph on page 7, lines 22-26 with the following paragraph:

As a result of employing these constitutions, since the vapor ~~deposited~~ deposition material evaporates without generating impurity gases such as H_2O, H_2, O_2, CO, CO_2 and N_2 during formation of a protective film on an FPD by electron beam vapor deposition or ion plating and so forth, high speed and stable film formation is possible, the fineness of the film is improved, and a uniform film can be formed having stable characteristics.

Please replace the paragraph on page 7, line 27 through page 8, line 2 with the following paragraph:

Moreover, the present invention provides a production method of a vapor ~~deposited~~ deposition material for an FPD protective film comprising a step in which one type or two or more types of polycrystalline body, sintered body, or single crystal selected from MgO, CaO, SrO, BaO, alkaline earth composite oxides, rare earth oxides, and composite oxides of alkaline earth oxides and rare earth oxides is formed, and a step in which a fluoride layer is formed on the surface of the above polycrystalline body, sintered body, or single crystal by surface treatment of the above polycrystalline body, sintered body, or single crystal with a fluoridation agent.

Please replace the paragraph on page 8, lines 3-5 with the following paragraph:

Consequently, a vapor ~~deposited~~ deposition material may be obtained comparatively easily that hardly reacts at all with CO_2 gas and H_2O gas in the atmosphere even if exposed to the atmosphere for a long period of time.

Please replace the paragraph on page 8, lines 10-13 with the following paragraph:

In addition, an FPD may be formed using this protective film by forming a protective film using the above vapor ~~deposited~~ deposition material for an FPD protective film, or a vapor ~~deposited~~ deposition material obtained from the above production method of a vapor ~~deposited~~ deposition material for an FPD protective film.

Please replace the paragraph on page 13, lines 16-28 with the following paragraph:

As shown in Fig. 11, vapor ~~deposited~~ deposition material 110 for an FPD protective film of the present invention is formed by polycrystalline body 111, the surface of which is covered with fluoride layer 112. Polycrystalline body 111 may be a sintered body or a fine sintered body. Polycrystalline body 111 is formed using one type or two types of powders selected from MgO, CaO, SrO, BaO, alkaline earth composite oxides, rare earth oxides, and composite oxides of alkaline earth oxides and rare earth oxides. Although there are no particular restrictions on the method for obtaining the polycrystalline body 111, a method comprising steps of molding powder of oxides and sintering the molded powder is typically widely known. Although Fig. 11 shows vapor ~~deposited~~ deposition material 110 for a protective film that is formed by polycrystalline body 111 in which the surface is covered with fluoride layer 112, it may also be formed by a single crystal in which the surface is covered with fluoride layer 112. Although there are no particular restrictions on the method for fabricating the single crystal, arc fusing is typically widely known (J. Chem. Phys. 35, p. 3752 3756 (1971)).

Please replace the paragraph on page 14, lines 11-18 with the following paragraph:

Next, an explanation is provided of the production method of vapor ~~deposited~~ deposition material 110 for an FPD protective film. This production method of vapor ~~deposited~~ deposition material 110 for an FPD protective film includes a step in which a

polycrystalline body 111 is formed using one type or two or more types of powders selected from MgO, CaO, SrO, BaO, alkaline earth composite oxides, rare earth oxides and composite oxides of alkaline earth oxides and rare earth oxides, and a step in which fluoride layer 112 is formed on the surface of this polycrystalline body 111 by surface treatment of that polycrystalline body 111 with a gaseous fluoridation agent.

Please replace the paragraph on page 17, line 31 through page 18, line 14 with the following paragraph:

In vapor ~~deposited~~ deposition material 110 for an FPD protective film manufactured in this manner, since the surface of polycrystalline body 111 is covered with fluoride layer 112, polycrystalline body 111 hardly reacts at all with CO_2 gas or H_2O gas in the atmosphere even if vapor ~~deposited~~ deposition material 110 is exposed to the atmosphere for a long period of time. As a result, the duration of the degassing exhaust treatment performed after placing this vapor ~~deposited~~ deposition material 110 in a vacuum deposition container can be shortened to a duration shorter than that of the prior art, thereby making it possible to reduce FPD production cost. In addition, since the surface of polycrystalline body 111 does not deteriorate in the case of this vapor ~~deposited~~ deposition material 110, vapor ~~deposited~~ deposition material 110 can be vapor deposition without the generation of impurity gases such as H_2O, H_2, O_2, CO, CO_2 and N_2 when forming a protective film on an FPD by electron beam deposition, ion plating and so forth. Consequently, a stable film can be produced at high speed and the fineness of the film is improved. In addition, when a substrate formed using the above vapor ~~deposited~~ deposition material 110 is incorporated in a PDP, resistance to sputtering during discharge can be improved. Thus, the above protective film is suitable for the formation of protective films of AC PDP, and can also be applied to the protective films of highly functional ceramic materials.

Please replace the paragraph on page 33, lines 5-6 with the following paragraph:

To begin with, the following describes examples of vapor ~~deposited~~ deposition materials using a sintered body, and said sintered body may be a single crystal.

Please replace the paragraph on page 33, lines 24-32 with the following paragraph:

A plurality of types of polycrystalline body 111 identical to Comparative Examples 1 29 were obtained according to the same procedure as Comparative Examples 1 29. This plurality of types of polycrystalline body 111 were held for 10 minutes in an HF gas atmosphere (temperature: 25°C) at a pressure of 35 Torr to reform the respective surfaces of polycrystalline body 111 and respectively form fluoride layer 112 on the surface of polycrystalline body 111. Vapor ~~deposited~~ deposition materials 110, in which the surface of polycrystalline body 111 was covered with fluoride layer 112 in this manner, were designated as Examples 1 29. The materials of each polycrystalline body 111 in Examples 1 29 are shown in Tables 1 and 2.

Please replace the paragraph on page 34, lines 9-16 with the following paragraph:

Next, films were deposited on glass substrate 21 by electron beam vapor deposition using each of the vapor ~~deposited~~ deposition materials 110 in Comparative Examples 1 29 and Examples 1 29 allowed to stand for 7 days in air. Furthermore, deposition conditions for protective film 24 consisted of placing vapor ~~deposited~~ deposition material 110 in a vacuum film deposition container followed by performing degassing exhaust treatment for 10 minutes while heating the vapor ~~deposited~~ deposition material, and depositing under conditions of an acceleration voltage of 15 kV, vapor deposition pressure of 1×10^{-2} Pa and vapor deposition distance of 600 mm.

Please replace the paragraph on page 34, lines 17-26 with the following paragraph:

The deposition rate and relative density of the film on glass substrate 20 were measured using the methods indicated below. Namely, deposition rate (Å/sec) was calculated by determining the film thickness (Å) by observing a cross section of the resulting film by high resolution SEM, and dividing the film thickness (Å) by deposition time (sec). Relative density (%) was calculated according to the ratio with the true density (g/cm^3) of the material. In the case the vapor ~~deposited~~ deposition material was composed of a simple mixture of two components (for example, MgO and CaO), the abundance ratio of component A and component B was determined, and true density of the film was calculated as $\{X\alpha + (1\ X)\beta\}$ (g/cm^3) in the case of representing component A (true density: αg/cm^3) with X, and representing component B (true density: βg/cm^3) with (1-X). Those results are shown in Tables 1 through 4.

Please replace the paragraph on page 38, lines 3-12 with the following paragraph:

As is clear from Tables 1 through 4, the weight gain rates of Examples 1 29 corresponding to Comparative Examples 1 29 can be seen to be significantly lower in comparison with Comparative Examples 1 29. Since the weight of the vapor ~~deposited~~ deposition material increases as a result of deterioration due to the sintered body reacting with CO_2 and H_2O in the air, the surface of the vapor ~~deposited~~ deposition material in Comparative Examples 1 29 having high weight gain ratios can be understood to have deteriorated considerably. On the other hand, since the weight gain ratios of the vapor ~~deposited~~ deposition materials in Examples 1 29 are remarkably low, the degree of deterioration of their sintered bodies can be understood to be low in comparison with

Comparative Examples 1 29. This is considered to be due to the surface of the sintered bodies being covered with a fluoride layer.

Please replace the paragraph on page 38, line 13 through page 39, line 3 with the following paragraph:

In addition, the deposition rates of Examples 1 29 are higher as compared with Comparative Examples 1 29, and the relative densities can also be seen to be higher. This is thought to be due to the vapor ~~deposited~~ deposition materials of Examples 1 29 exhibiting less generation of impurity gas in comparison with the vapor ~~deposited~~ deposition materials of Comparative Examples 1 29 during deposition of protective film 24. As a result, FPD in which a protective film is formed using a vapor ~~deposited~~ deposition material of the present invention can be understood to have high sputtering resistance of the film and improved service life.

Please replace the paragraph on page 39, lines 4-5 with the following paragraph:

Continuing, the following describes examples of protective films fabricated from vapor ~~deposited~~ deposition materials like those described above.